

IN THE CLAIMS:

1. (Currently Amended) A high-level meta-layer set of computer instructions residing on computer-readable media for integrating the communications within a manufacturing facility comprising:

a graphic user interface generator for generating browser compatible graphic displays based upon uniform language data;

a structured data exchange for communicating uniform language data to the graphic user interface generator for display, the structured data exchange including;

a look-up table to enable translating between legacy data and uniform language data; and

a two-way communication layer allowing real-time interaction between the graphic user interface generator and the software wrappers; and,

software wrappers for enabling communicating of legacy data between the structured data exchange and one or more software servers whereby a user interaction received at the graphic user interface generator modifies legacy data at the one or more software servers.

2. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 1, where the graphic user interface generator is an HTML page generator.

3. (Currently Amended) The computer instructions residing on computer-readable media according to Claim 1, where the graphic user interface generator is JAVA wherein modifying legacy data includes retrieving a numerical control program for use on at least one machine tool controller.

4. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 1, where the structured data exchange comprises a network infrastructure.

5. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 4, where the network infrastructure comprises one or more software servers.

6. (Currently Amended) The computer instructions residing on computer-readable media according to Claim 5 ~~4~~, ~~where at least one of the software servers is operating under UNIX~~ wherein modification of legacy data includes retrieving legacy data to generate the browser compatible graphic displays.

7. (Currently Amended) The computer instructions residing on computer-readable media according to Claim 5 ~~6~~, ~~where at least one of the software servers is operating under LINUX~~ wherein the retrieving legacy data includes retrieving computer-assisted drafting (CAD) files to generate the browser compatible graphic displays.

8. (Currently Amended) The computer instructions residing on computer-readable media according to Claim 7, ~~where at least one of the software servers is operating under Windows~~ wherein the modification of data includes the modification of (CAD) files by generating commands to at least one software server.

9. (Currently Amended) The computer instructions residing on computer-readable media according to Claim 5 ~~6~~, ~~where at least one of the software servers is operating under DOS~~ wherein the retrieving legacy data includes retrieving numerically control files to generate the browser compatible graphic displays.

10. (Currently Amended) The computer instructions residing on computer-readable media according to Claim 5 ~~9~~, ~~where at least one of the software servers is operating under Macintosh~~

OS wherein the modification of data includes the modification of numerically control files by generating commands to at least one software server.

11. (Currently Amended) The computer instructions residing on computer-readable media according to Claim 5 6, where at least one of the software servers is CATIA™ wherein the retrieving legacy data includes retrieving parts inventory files to generate the browser compatible graphic displays.

12. (Currently Amended) The computer instructions residing on computer-readable media according to Claim 5 11, where at least one of the software servers is PARTRAN wherein the retrieving parts inventory files includes ordering parts according to the graphic display of parts inventory files.

13. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 5, where at least one of the software servers is an Manufacturing Enterprise System.

14. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 5, where at least one of the software servers is a workstation management system.

15. (Currently Amended) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is AutoCAD™ is an Internet gateway.

16. (Cancelled.)

17. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is Scheduling Software.

18. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is an e-mail server.

19. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is a parts catalogue.

20. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is an assembly procedure library

21. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is a warehouse management program.

22. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is a human resources management program.

23. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is a benefits management software program.

24. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is an internet router.

25. (Previously Presented) The computer instructions residing on computer-readable media according to Claim 6, where at least one of the software servers is an intranet server.

26. (Withdrawn) A method of serving information from at least one server comprising:

- a. logging on to a high-level meta-layer computer product;

- b. requesting information from the computer product;
- c. examining the requested information to determine the server containing the requested information;
- d. transmitting the information request to the appropriate server;
- e. receiving the requested information from the appropriate server; and,
- f. displaying the requested information.

27. (Withdrawn) The method of Claim 26 wherein the logging on comprises receiving security privileges on the at least one server according to a log-on identity.

28. (Withdrawn) The method of Claim 27 wherein the security privileges accorded to the log-on identity are defined by a system administrator.

29. (Withdrawn) The method of Claim 26 wherein requesting information occurs through interaction with a browser.

30. (Withdrawn) The method of Claim 26 wherein requesting information occurs through interaction with a graphic user interface.

31. (Withdrawn) The method of Claim 26 wherein examining comprises a log-in to an appropriate remote server.

32. (Withdrawn) The method of Claim 26 wherein examining comprises presenting options to the user and presenting information according to a chosen option from the user.

33. (Withdrawn) The method of Claim 26 wherein transmitting means sending a request by means of a computer network.

34. (Withdrawn) The method of Claim 33 wherein the network is a LAN.

35. (Withdrawn) The method of Claim 33 wherein the network is a WAN.

36. (Withdrawn) The method of Claim 33 wherein the network is the Internet.

37. (Withdrawn) The method of Claim 33 wherein the network is a wireless network.

38. (Withdrawn) The method of Claim 33 wherein the network is a satellite link.
39. (Withdrawn) The method of Claim 33 wherein the network links to at least one remote server.
40. (Withdrawn) The method of Claim 26 wherein receiving means receiving a request by means of a computer network.
41. (Withdrawn) The method of Claim 39 wherein the network is a LAN.
42. (Withdrawn) The method of Claim 40 wherein the network is a WAN.
43. (Withdrawn) The method of Claim 40 wherein the network is the Internet.
44. (Withdrawn) The method of Claim 40 wherein the network is a wireless network.
45. (Withdrawn) The method of Claim 40 wherein the network is a satellite link.
46. (Withdrawn) The method of Claim 40 wherein the network links to at least one remote server.
47. (Withdrawn) The method of Claim 26 wherein displaying is by means of a browser.
48. (Withdrawn) The method of Claim 26 wherein displaying is by means of a graphic user interface.
49. (Currently Amended) A system for sharing information incident to manufacturing comprising:
- a computer network, itself comprising at least one server;
 - at least one computer remote to the server and connected to the server to allow communication with the server;
 - a plurality of software servers containing legacy data incident to manufacturing and communicatively connected to the network; and
 - a software product, itself comprising:

a structured data exchange for communicating uniform language data to a graphic user interface generator for display, the structured data exchange including;

a look-up table to enable translating between legacy data and uniform language data; and

a two-way communication layer allowing real-time interaction between the graphic user interface generator and the software wrappers;

wrappers for communication between each of the software servers and a structured data exchange; and

the graphic user interface generator for displaying uniform language data from the structured data exchange whereby a user interaction received at the graphic user interface generator modifies legacy data at the one or more software servers.

50. (Previously Presented) The system according to Claim 49, where the graphic user interface generator is an HTML page generator.

51. (Currently Amended) The system according to Claim 49, ~~where the graphic user interface generator is JAVA~~ wherein modifying legacy data includes retrieving a numerical control program for use on at least one machine tool controller.

52. (Currently Amended) The system according to Claim 49, ~~where at least one of the software servers is operating under UNIX~~ wherein modification of legacy data includes retrieving legacy data to generate the browser compatible graphic displays.

53. (Currently Amended) The system according to Claim 49, ~~where at least one of the software servers is operating under LINUX~~ wherein the retrieving legacy data includes retrieving computer-assisted drafting (CAD) files to generate the browser compatible graphic displays.

54. (Currently Amended) The system according to Claim 49, ~~where at least one of the software servers is operating under Windows~~ wherein the modification of data includes the modification of (CAD) files by generating commands to at least one software server.

55. (Currently Amended) The system according to Claim 49, ~~where at least one of the software servers is operating under DOS~~ wherein the retrieving legacy data includes retrieving numerically control files to generate the browser compatible graphic displays.

56. (Currently Amended) The system according to Claim 49, ~~where at least one of the software servers is operating under Macintosh OS~~ wherein the modification of data includes the modification of numerically control files by generating commands to at least one software server.

57. (Currently Amended) The system according to Claim 49, ~~where at least one of the software servers is CATIA™~~ wherein the retrieving legacy data includes retrieving parts inventory files to generate the browser compatible graphic displays.

58. (Currently Amended) The system according to Claim 49 ~~57,~~ where at least one of the software servers is PARTTRAN wherein the retrieving parts inventory files includes ordering parts according to the graphic display of parts inventory files.

59. (Previously Presented) The system according to Claim 49, where at least one of the software servers is an Manufacturing Enterprise System.

60. (Previously Presented) The system according to Claim 49, where at least one of the software servers is a workstation management system.

61. (Previously Presented) The system according to Claim 49, where at least one of the software servers is AutoCAD™.

62. (Cancelled.)


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CUSTOMER NUMBER

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63. (Previously Presented) The system according to Claim 49, where at least one of the software servers is Scheduling Software.

64. (Previously Presented) The system according to Claim 49, where at least one of the software servers is an e-mail server.

65. (Previously Presented) The system according to Claim 49, where at least one of the software servers is a parts catalogue.

66. (Previously Presented) The system according to Claim 49, where at least one of the software servers is an assembly procedure library

67. (Previously Presented) The system according to Claim 49, where at least one of the software servers is a warehouse management program.

68. (Previously Presented) The system according to Claim 49, where at least one of the software servers is a human resources management program.

69. (Previously Presented) The system according to Claim 49, where at least one of the software servers is a benefits management software program.

70. (Previously Presented) The system according to Claim 49, where at least one of the software servers is an internet router.

71. (Previously Presented) The system according to Claim 49, where at least one of the software servers is an intranet server.

72.-75 (Withdrawn)